DUAL PUMP STARTER PANEL

Product Code: PSP 33M

Features:

- Three digits 7 segment bright display for current.
- Calibration: using front keys.
- User Programmable.
- Password protected set parameters.
- Inbuilt 3 Phase 10 A Contactor for load control.
- Message Display for faults.

The Starter Panel has is solid state Current Meters. It measures currents and provides protection against overload for both the motors. This is based on a Microchip, programmed for the application. The Meter's supplied preprogrammed for operation and can be directly installed.

Specifications:

Nominal Input Current: - 0-9 A per Phase.
Accuracy: Current: - 0.25% ± 1 dgts.
Resolution: Current: - 0.01 A
Environmental:-

1] Working Temp : 0 to 55º C
2] Storage Temp : 10 to 70º C
3] Relative humidity : 0 – 95 % Non-Condensing
4] Warm up time : 10 Sec

Enclosure:

1] Mounting : Panel mounting. (Cut Out Size: 182(H) X 92(W)
2] Enclosure : 105 (W) X 200 (L) X 193 (H) mm.
3] Terminal : Screw ON Terminals.

WORKING:

In normal running mode, display shows

1. **r-HP--**R phase Current
2. **y-HP--**Y phase Current
3. **b-HP--**B phase Current
4. **r-Rp--**R phase Current
5. **y-rP--**Y phase Current
6. **b-rP--**B phase Current
7. **< Faults if any>**

- **oL HP--**Over load HP
- **Ub HP--**Unbalance HP
- **oL rP--** Over load rP
- **Ub rP--** Unbalance rP
- **SP HP--**Single phase HP
- **SP rP--**Single phase rP

All the protections like Overload, current unbalance are activated in Auto as well as manual mode. Auto/ Manual selection is done from front switch. In any mode, if the faults are present controller immediately turns off the motor having the fault. The motors can be restarted by resetting the fault by pressing the 'Decrement' key.

In manual mode there are two separate switches, one for each motor to turn on and off. If the supply is within the range and there is no fault condition, an ON timer starts decrementing to zero and motor relay is turned ON. This relay interlocks with the Pump On signal. After the Pump motor is switched on, if any unhealthy condition occurs, fault LED start blinking up to trip delay time and then the is Relay is turned OFF. Fault LED continuously glows if the faulty condition persists.

LED Indications:

RED LED: Motor 1 (RWP) and Motor2 (HPP): Over Load, Current Unbalance, and Single Phase Faults.
Green LED: If auto Mode Green LED turns ON for manual mode Green LED is turned off And on LED display 'MAN' is displayed.

KEYS:

- SET : This key is used to change the controller from RUN mode to
- FUNCTION mode for parameter setting
- INC : Up scroll the parameter &

parameter value.

- DEC : Down scroll the parameter & parameter value, For manual reset of Fault.

Note: To Load default parameter Press INC key on power ON.

Front Switches:

1. Auto / Manual selection switch.
2. RWP (Motor1) manual ON/OFF control
3. HPP(Motor 2) manual ON/OFF control

SETTINGS:

Sr. No	Parameter	Min	Max	Default	Unit
1	Over Load : oLHP	2.0	13.0	5.0	Amp
2	Over Load : oLrP	2.0	13.0	5.0	Amp
3	Unbalance Current : ubHP	20	50	40	% of Over Load
4	Unbalance Current : ubrP	20	50	40	% of Over Load
5	Over Load trip Delay : oL trp	1	30	5	sec
6	Unbalance Current trip Delay: ub trp	1	30	5	sec
7	HPP Motor ON Delay : HPon	5	300	10	sec
8	RWP Motor ON Delay : HPon	5	300	10	sec
9	HPP Single/Three Phase *	1P	3P	3P	NA
10	RWP Single/Three Phase *	1P	3P	3P	NA
11	Display Currents Enable : dISP (If disabled, shows AUTO / MAN selection)	no	yes	yes	NA

SPP fault for the same is disabled for the motor which is selected as single phase. Current, displayed will be of the connected phase.

CONTROLLER FUNCTIONS:

Password is 11 for Overload setting, 20 for rest parameter settings & password 5 is for displaying currents for one cycle.

Procedure to change parameter settings:

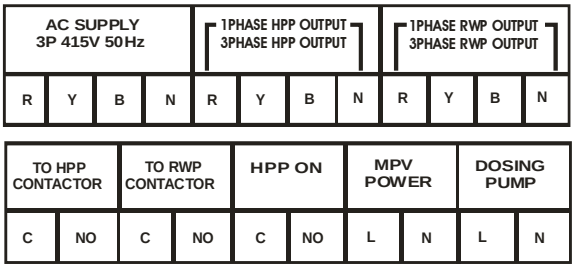
1. Press SET key.
2. Enter Correct Password.
3. Wait to check password.
4. Using UP Arrow & down Arrow key user can change setting parameters.
5. Press UP Arrow Key to increment parameter value up to maximum limit.
6. Press down Arrow key to decrement parameter value down to minimum limit.
7. To save the settings (value) wait for five seconds

Note:

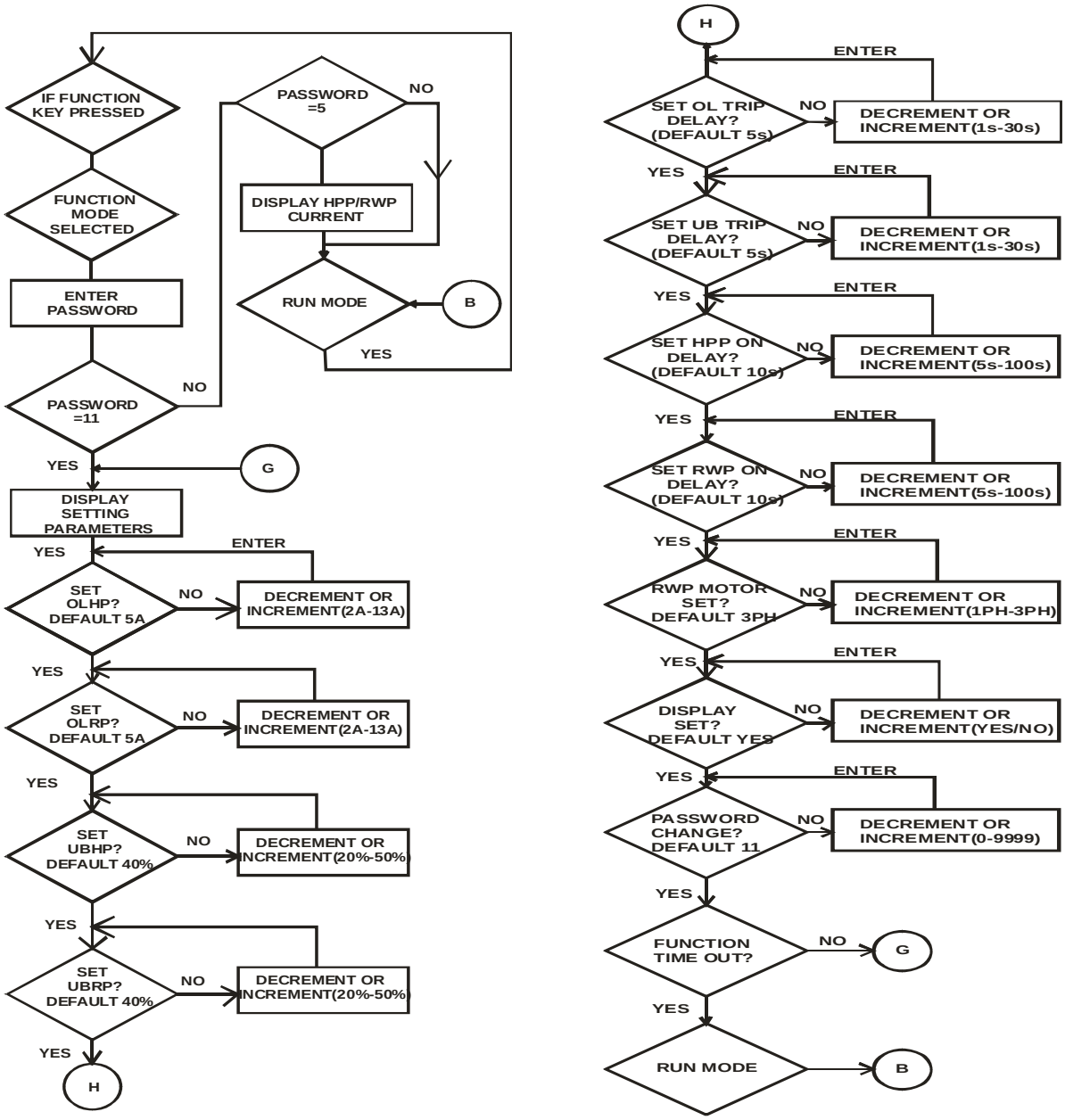
1. Calibration setting is for Factory Setting only.
2. For manual reset of faults, press Decrement Key.
3. Password 5 is applicable only When display current enable mode is disabled.
4. To Load default parameter Press INC key on power ON.

Field Terminal Layout:

Back View:



FLOWCHARTS:



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